

JAN 12 1989

<u>CERTIFIED MAIL-</u>
RETURN RECEIPT REQUESTED

Mr. H. Gilbert Weil Union Carbide Corporation P.O. Box 670 Bound Brook, New Jersey 08850

Re: SCP-Carlstadt Site, Administrative Orders Index Nos. II-CERCLA-50114 ("the Order")

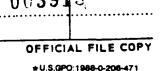
Dear Mr. Weil:

On December 16, 1988, you submitted the Feasibility Study Work Plan For the Operable Unit 1 ("FS Work Plan"). EPA hereby approves this FS work plan, subject to the following revisions:

<u>page</u>

- 1-1 Delete all of Section 1.1, Section 1.1.1, and Section 1.2. through 1-6
- 1-6 In the second paragraph in Section 1.3, change "two or three selected remediation technologies" to "at least three remediation technologies".
- 2-1 Fourth sentence in the first paragraph should be revised to read "This response will address the human health risk, environmental impacts, and exposure pathways of concern to EPA." Environmental impacts include the continued migration of contaminants into the off-site water table aquifer, Peach Island Creek, and the till and bedrock aquifers.
- 2-2 The categories of alternatives listed here do not correspond to those listed in EPA's RI/FS Guidance, "Interim Final" version dated September, 1988, previously provide to ERM. (See Guidance at p. 4-8.)
- 3-1 Several of the screening factors discussed here should first be applied to the technologies, in order to reduce the number of alternatives.
- 4-1 Delete third paragraph.
- 4-2 In Section 4.1.3, delete second sentence which begins "However, final data..."

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4-3 Revise Section 4.2 "Program - Part II" so that the word "remedy" or "remedies" is replaced by "technology" or "technologies". In Section 4.2.4, change to "cost estimate for use in conducting the detailed evaluation of ..."

More detailed information regarding specific Treatability Study methods had been requested by EPA. This information, when received, will be reviewed by the Agency, and when approved, will be incorporated into the FS Work Plan.

- 4-9 In second paragraph, delete parenthetical phrase "if feasible", and revise wording to reflect that three technologies will be evaluated, instead of two.
- 5-1 In the first paragraph, it should be clear the volume of sludge cited (10 cy) refers only to the material in the tank. The volume in the pit is estimated to be much higher, approximately 2000-3000 cy. Revise wording accordingly.

Delete sentence which begins "Additional alternative definition can be developed..."

Also in the first paragraph, delete last sentence which begins "The PRP Committee reserves the right...."

In the second paragraph, wording should be revised to reflect the evaluation criteria discussed in EPA's RI/FS Guidance, cited above. Delete sentence which begins "The PRP Committee reserves the right...." The need to conduct any additional pilot and full scale tests will be determined by EPA at a later date. Delete last sentence, which begins "The result of these pilot and full-scale tests...."

- 5-2 The additional two criteria (State acceptance and Community acceptance) should be considered in the FS. As is made clear in the RI/FS guidance, detailed evaluation of these two criteria may be postponed until the solicitation of formal public comment; however, the criteria must be addressed, and briefly discussed. State acceptance can be evaluated in more detail than community acceptance.
- 5-5 Revise Section 5.1.6 to reflect EPA's RI/FS Guidance. This section should be titled "Compliance with ARARS". Revise the second sentence in this section to read "The basis of the evaluation will include whether chemical-, location-, or action-specific ARARs can be met or closely met by the alternative under consideration." Because this operable unit remedy will not be the final site remedy, it may be appropriate to waive certain ARARs; however, most action-

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- 5-5 and location-specific ARARS, as well as to-be-considered material must be addresses and compared to each of the alternatives under consideration.
- 5-5 In Section 5.1.7, Risk associated with exposure to the till and bedrock aquifers will not be addressed in this FS, however, environmental risk associated with continued migration of contaminants to the till and bedrock aquifers from the sludge, surface soils, and shallow groundwater must be addressed.
- 5-6 Delete Section 5.2.

In Section 5.3, first paragraph, change "Preliminary draft Feasibility Study" to "Preliminary FS Report".

Also in Section 5.3, change "seven evaluation criteria" to "nine evaluation criteria".

Revise Section 5.4 to reflect wording in Paragraph 27.B. of Administrative Order, Index No. II CERCLA-50114. A Preliminary FS Report will be submitted to EPA, and after Agency review and comment, a Draft FS Report will be prepared and submitted to EPA within 15 days of receipt of EPA comments on the Preliminary FS Report.

6-1 In first paragraph, change date from "April 1, 1988" to "April 1, 1989".

Also in first paragraph, change "Draft Final Operable Unit FS Report" to "Preliminary FS Report."

Delete third paragraph.

6-2 In second Paragraph, last sentence, change "Final Draft FS Report" to "Preliminary FS Report". (See comment on page 5-6).

An Interim Status report will be submitted to EPA at the conclusion of each of the three phases of the FS. The Phase I Report will be due to EPA on January 27, 1989. The Phase II Report will be due to EPA on February 17, 1989. The Phase III Report will be due to EPA on March 13, 1989.

Add the following sentence to page 6-2: "Interim Status Reports submitted to EPA at the conclusion of Phases I, II and III will contain a detailed description of all work

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6-2 In second paragraph, change date from "1 April, 1988" to "April 1, 1989".

Tables

2-1 Containment is a potential response action for the surface soils. (Place an "x" in the appropriate spot.)

Off-Site disposal is a potential response action for the shallow ground water. (Place an "x" in the appropriate spot.)

Diversion of Run-On and Run-Off is not in itself a source control action, but rather is an activity that may be part of another action(e.g.) containment. Revise accordingly.

2-2 The table is too vague: more specific technologies should be listed (i.e. types of chemical treatment, etc.).

The symbol in the footnote indicating multiple technologies is not used; its intention is unclear.

2-3 Some of the alternatives listed on this table do not represent complete remedial alternatives for each media. EPA recognizes that this table is intended to demonstrate examples of alternatives, but the table must be clarified to resolve several uncertainties. For example, excavation, by itself, is not a complete remedial alternative; the difference between on-site treatment/containment and on-site treatment/on-site disposal alternatives is unclear. In addition, there are no containment technologies listed within the on/site treatment/containment alternatives.

On page 3 (examples of potential alternatives for shallow groundwater) the note accompanying the table should be revised to reflect the fact that no single treatment method listed in the third column will adequately remediate the groundwater. It must be made clear the potential alternatives will include not only "one from each set below", but more likely, several from each set listed. In addition, groundwater recovery should include an induced flow option.

Schedule Change "Final Draft Report" to "Preliminary FS Report".

EPA considers the submission of this FS Work Plan to constitute a request for approval of a modification of the EPA-approved Work Plan pursuant to Paragraph 29.B. of the Order. The deadline for submission of the Preliminary Feasibility Study Report to EPA is April 1, 1989, as indicated on the schedule contained in the FS Work Plan. This FS Work Plan, as approved with all of the revisions listed above, supercedes and replaces Section 3.0 of the Work Plan prepared by Dames & Moore which is dated October 1, 1985.

Pursuant to paragraph 29.B. of the Order, the FS Work Plan, with revisions, should be implemented immediately by Respondents. For the record, please revise the FS Work Plan in accordance with all of the revisions noted above, and submit the revised FS Work Plan to EPA on or before February 15, 1989.

Sincerely yours,

Raymond Basso, Chief New Jersey Compliance Branch

cc: Pamela Lange, NJDEP
 Harry Yeh, EBASCO
 William Warren, Esq.
 Thomas Armstrong, General Electric

bcc: J. Rooney, ORC-NJSUP

- J. Schmidtberger, ERRD-NJCB
- R. Schwarz, ERRD-NJRAB

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